CLAIMS

1. A method of monitoring performance of a wireless system, comprising:

a) transmitting a communication signal from a wireless device to a radio base station;

b) obtaining uplink performance parameters associated with the communication signal;

c) obtaining location information of the wireless device by analyzing the communication signal; and

d) evaluating the performance of the wireless system using the uplink performance parameters and the location information of the wireless device.

2. The method of claim 1, wherein the step of evaluating the performance of the wireless system is performed in real-time.

3. The method of claim 1, wherein the location information of the wireless device is collected from a plurality of radio base stations.

4. The method of claim 1, wherein the step of obtaining the location information involves analyzing timestamp data.

5. The method of claim 1, wherein the step of obtaining the location information involves using a time difference of arrival location processor.

6. The method of claim 5, wherein the time difference of arrival location processor is in the wireless device.

7. The method of claim 5, wherein the time difference of arrival location processor is in the wireless system.

8. A method of monitoring performance of a wireless system including a radio base station and a wireless device, the method comprising:

a) transmitting a communication signal from the wireless device to the radio base station;

b) obtaining uplink performance parameters associated with the communication signal;

c) obtaining location information of the wireless device; and

d) evaluating the performance of the wireless system using the uplink performance parameters and the location information of the wireless device.

9. The method of monitoring performance of a wireless system according to claim 8, wherein obtaining location information of the wireless device is accomplished using a global positioning system unit in the wireless device.

10. The method of monitoring performance of a wireless system according to claim 8, wherein obtaining location information of the wireless device is accomplished using RF finger printing using dispersion characteristics of the communication signal.

11. A method of monitoring performance of a wireless system, comprising:

a) transmitting a communication signal from a plurality of wireless devices to a radio base station;

b) obtaining uplink performance parameters associated with the communication signals;

c) obtaining location information of the plurality of wireless devices by analyzing the communication signal; and

d) evaluating the performance of the wireless system using the uplink performance parameters and the location information of each of the plurality of wireless devices.

12. The method of claim 11, wherein the step of evaluating the performance of the wireless system is performed in real-time.

13. The method of claim 11, wherein the location information of the plurality of wireless devices is collected from a plurality of radio base stations.

14. The method of claim 11, wherein the step of obtaining the location information involves analyzing timestamp data.

15. The method of claim 11, wherein the step of obtaining the location information involves using a time difference of arrival location processor.

16. The method of claim 15, wherein a time difference of arrival location processor is in each of the plurality of wireless devices.

17. The method of claim 15, wherein the time difference of arrival location processor is in the wireless system.

18. A method of monitoring performance of a wireless system including at least one radio base station and a plurality of wireless devices, the method comprising:

a) transmitting respective communication signals from the plurality of wireless devices to the at least one radio base station;

b) obtaining uplink performance parameters associated with communication signals;

c) obtaining location information of the plurality of wireless devices; and

d) evaluating the performance of the wireless system using the uplink performance parameters and the location information of the plurality of wireless devices.

19. The method of monitoring performance of a wireless system according to claim 18, wherein obtaining location information of the plurality of wireless devices is accomplished using a global positioning system unit in each of the plurality of wireless devices.

20. The method of monitoring performance of a wireless system according to claim 18, wherein obtaining location information of each of the plurality of wireless devices is

accomplished using RF finger printing using dispersion characteristics of the communication signals.

21. A system for monitoring performance of a wireless system, said system comprising:

a plurality of wireless devices which transmit communications signals to a radio base station;

a first receiver located at the radio base station which receives the communication signals and transmits the communication signals to a switch;

a second receiver located at the radio base station which monitors the communication signals and transmits timestamp data associated with the communication signals to the switch; and

a system analyzer coupled to the switch which evaluates the performance of the wireless system based on uplink performance parameters and the location of the wireless devices.

22. The system of claim 21, wherein a time difference of arrival location processor is coupled to the switch and to the system analyzer.

23. A system for monitoring performance of a wireless system, said system comprising:

a plurality of wireless devices which transmit communications signals to a radio base station;

a first means for receiving the communication signals and transmitting the communication signals to a switch;

a second means for monitoring the communication signals and transmitting timestamp data associated with the communication signals to the switch; and

a system analyzer coupled to the switch which evaluates the performance of the wireless system based on uplink performance parameters and the location of the wireless devices.

24. A system for monitoring performance of a wireless system, the wireless system including a plurality of wireless devices transmitting communication signals to a radio base station, said system comprising:

a first receiver located at the radio base station that receives the communication signals and transmits the communication signals to a switch;

a second receiver located at the radio base station which receives location information associated with each of the plurality of wireless devices; and

a system analyzer coupled to the switch which evaluates the performance of the wireless system based on uplink performance parameters and the location of the wireless devices.

25. The system of claim 24, wherein the second receiver receives location information using RF finger printing data associated with distortion characteristics of the communication signals.

26. The system of claim 24, wherein the second receiver receives location information from global position system units in each of the plurality of wireless devices.

27. A system for monitoring performance of a wireless system, the wireless system including a wireless device transmitting a communication signal to a radio base station, said system comprising:

a first receiver located at the radio base station that receives the communication signals and transmits the communication signals to a switch;

a location measurement unit in the wireless device that determines the location of the wireless device; and

a system analyzer coupled to the switch which evaluates the performance of the wireless system based on uplink performance parameters and the location of the wireless device.

28. The system of claim 27, wherein the location information measurement unit is associated with a time difference of arrival technique.

29. A system for monitoring performance of a wireless system, the wireless system including a wireless device transmitting a communication signal to a radio base station, said system comprising:

a first receiver located at the radio base station that receives the communication signals with uplink performance parameters, and transmits data associated with the uplink performance parameters to the wireless device;

a location measurement unit in the wireless device that determines the location of the wireless device; and

a system analyzer on the wireless device that evaluates the performance of the wireless system based on uplink performance parameters and the location of the wireless device.